TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

9K

March 24, 2005

TO:

Internal File

THRU:

Pamela Grubaugh-Littig, Permit Supervisor

THRU:

Dave Darby, lead

FROM:

Joe Helfrich, Land use, Biolog

RE:

Mathis / Summit Creek Boundary Change, Andalex Resources Inc., Centennial

Mine, C/007/0019, Task ID# 2119

SUMMARY:

On January 14, 2005 the Division received a Boundary Change for the Centennial Mine. The proposed change is in the Mathis tract, (380 acres), State L. B. A., (80 acres), and Federal Summit Creek Lease Area, (630.21 acres), totaling 1090.21 acres. The leases can be located on the Deadman Canyon and Helper 7.5'quadrangles in Township 12 South Ranges 10 and 11East, Sections 31 and 36. The proposed change is for underground mining only. On July 2, 2004 the Division received a response to the June 18, 2004 Technical analysis of the Incidental Boundary Change for the Centennial Mine. This memo will include a review of the Land Use and Biology sections of the regulations.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Wildlife maps included in the application are a vegetation map, (plate 19A), a wildlife distribution map, (plate 34), this map depicts the location of raptor nests, Mule Deer, Elk and Sage Grouse ranges,). A current raptor inventory, (2004 appendix D), is included in the MRP.

Findings:

The information provided in the application and approved MRP is adequate to meet the requirements of this section of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

Historic and Archeological resource information is provided for on page 4-1 of the application. Additional information is included on pages 4-2,3,4 and Appendix C of the approved MRP. As the overburden ranges from 2,600' to 3,100' above the current mine workings and is an extension of the current mine workings it is anticipated that potential impacts to the surface land resources would be minimal. An order one survey for the addition of the lease is being prepared by John Senulis of Senco Phoenix Inc. The survey will be sent to the State Historic Preservation Office requesting their concurrence.

Findings:

The information provided in the application and approved MRP is adequate to meet the requirements of this section of the regulations.

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

Analysis:

The vegetation resource information is provided for in chapter three of the MRP. Text changes for this IBC include page 3-1of the Biology section of the application. The vegetation map is identified as plate 19A. The vegetation communities for the mine plan area include Mountain—Brush, Desert-Shrub, Pinyon-Juniper Woodland, Sagebrush-Grass, Conifer-Aspen, and Minor streamside vegetative types that cover the entire mine plan area. The vegetation community for this acreage addition is predominately Sagebrush-Grass and Aspen.

The application includes a list of possible threatened, endangered and candidate plant species identified in the U. S. Fish and Wildlife Service current listing for Carbon County as appendix M.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Analysis:

The Fish and Wildlife resource information is addressed on pages 3-2, 3-3, 3-11 and provided for in appendices A, D and M of the application.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

The Land Use resource information is provided for on page 4-1 of the application. As the overburden ranges from 2,600' to 3,100' above the current mine workings and is an extension of the current mine workings it is anticipated that potential impacts to the surface land resources would be minimal.

The area is currently used for grazing, recreation and wildlife. Section 645-301-411.110 on page 4-1 indicates that Deadman, Straight and Hoffman Canyons would fall into three categories: 1) Fish and Wildlife habitat, 2) recreation lands and 3) Range Lands. According to the application the land has also historically been used for coal mining. By the early 1900's the majority of the Book Cliffs coal field had been prospected. Knight—Ideal, Zion, Olsen, and Sutton were mines that produced coal from the Gilson and Aberdeen coal seams. An additional prospect in the Sunnyside seam produced 1,400 tons of coal in 1964.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Vegetation Reference Area Maps

The vegetation reference area maps will not be affected by the addition of the Mathis/Summit Creek IBC. They are included in the current MRP.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Protection and Enhancement Plan

The protection and enhancement plan is addressed in appendix A of the approved MRP. The application states that "the Mathis/Summit Creek Incidental Boundary Change is simply an extension of our underground mine workings under roughly 2,600 to 3,000 feet of cover. Therefore there should be no effect to the surface Biology of the area. The application also includes a commitment to develop a mitigation plan with the Division of Wildlife Resources should problems occur.

Endangered and Threatened Species

The application includes a list, (appendix M), of possible threatened, endangered and candidate plant and wildlife species identified in the U. S. Fish and Wildlife Service current listing for Carbon County. There are no threatened or endangered plant species known for the area according to information from Bob Thompson of the Forest Service and the Division of Wildlife Resources survey. Of the 10 species listed for Carbon County, only one, the bald eagle, could potentially occur in the permit area. However, the occurrence is most likely to be migration through the area rather than nesting or roosting. Most threatened or endangered species that could occur in Carbon County occur at lower elevations than the mine and have no habitat in the proposed permit area expansion.

In addition to the species discussed in the application, there is also a potential to affect the threatened and endangered fish of the upper Colorado River basin through surface water depletion. The mine has potential, through water depletions, of adversely affecting four listed threatened and endangered fish species of the upper Colorado River drainage. The Fish and Wildlife Service requires mitigation when water depletions exceed 100 acre-feet annually. According to the information in the application 47.61acre feet/year net gain of water are provided to the upper Colorado River basin. Calculations are provided in table III-12.

Bald and Golden Eagles

Bald Eagles do not nest in the area. They could possibly be seen migrating through the area during the winter months.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

There are no known wetlands within the proposed IBC.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

Analysis:

Vegetation should not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-537, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-764, -301-830.

Analysis:

The reclamation plan will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The reclamation plan will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

The reclamation plan will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity. The protection and enhancement plan is addressed in appendix A of the approved MRP. The application states that "the Mathis/Summit Creek Incidental Boundary Change is simply an extension of our underground mine workings under roughly 2,600 to 3,000 feet of cover. Therefore there should be no effect to the surface Biology of the area. The application also includes a commitment to develop a mitigation plan with the Division of Wildlife Resources should problems occur.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

CONTEMPORANEOUS RECLAMATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.100; R645-301-352, -301-553, -302-280, -302-281, -302-282, -302-283, -302-284,

Analysis:

Contemporaneous reclamation will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

Revegetation: General Requirements

Revegetation will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Revegetation: Timing

Timing will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Revegetation: Mulching and Other Soil Stabilizing Practices

These practices will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Revegetation: Standards For Success

Standards for success will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Reclamation Monitoring And Sampling Location Maps

Reclamation monitoring and sampling location maps will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Reclamation Treatments Maps

Reclamation treatment maps will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity

Revegetation and Restoration of Soil Productivity

Revegetation and restoration of soil productivity will not be affected by the addition of the Mathis/Summit IBC. There is no surface disturbance associated with this permitting activity.

Findings:

The information provided in the current MRP is adequate to meet the requirements of this section of the regulations.

RECOMMENDATIONS:

The application is recommended for approval.

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